UNITED STATES PATENT AND TRADEMARK OFFICE

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EXAMINER
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ART UNIT	PAPER NUMBER
2141	

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _29 August 2001_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-29_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-29_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _29 August 2001_ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _1/4/02_.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Claims 1-29 are pending.

Information Disclosure Statement

1.   The information disclosure statement (IDS) submitted on 1/04/2002 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the Office. An initialed and dated copy of Applicant's IDS form 1449, is attached to the instant Office action.

Drawings

2.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: **200, 310, 312 and 620**. Corrected drawing sheets, or amendment to the specification to add the reference character(s) in the description, are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not

accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: **500**. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character **400** has been used to designate both "NAPT Router" and "NETBIOS-ENABLED NAPT PROCESS". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5.   The disclosure is objected to because of the following informalities: "...step 552 in FIG.

5B." should read, "...step 552 in FIG. 5C." Appropriate correction is required.

Claim Objections

6.   Claim 7 is objected to because of the following informalities: punctuation—use of semi-

colon (:) should be replaced with a period (.). Appropriate correction is required.

Claim Rejections - 35 USC § 102

7.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8.   Claims **1-7, 13, 14, 16-19, 22-24 and 26-29** are rejected under 35 U.S.C. 102(e) as being

anticipated by *March et al* [US 20030007486].

      a.   **Per claim 28,** *March et al* teach an apparatus for translating between logical

addresses and ports of a first network, and logical addresses and ports of a second network

connected to the first network at an intermediate device, comprising:

- means for receiving at the intermediate device a first packet from a first device
  having a first address on the first network [**Figures 1 and 2, paragraphs 0006,
  0020-0041, 0124, 0181, 0182 and 0202; application server receives packet
  from user or device within the same network**];

- means for sending a second packet to a second device on the second network in
  response to receiving the first packet, the second packet including, in a source
  address field, data indicating a particular address of the intermediate device on the
  second network [**Figure 1, Abstract, paragraphs 0006, 0007, 0024 and 0126-
  0153; a message is sent to the second application server of a second network,
  message contains source, port and destination address data**];

- means for determining whether the first packet includes a first message that
  registers a first resource on the first device with a protocol server for a particular
  protocol, the protocol server available at the second device on the second network
  [**paragraphs 0022, 0024, 0032-0035, 0041-0054, 0070-0084 and 0142; parsing
  determines if the EndpointId includes information for a resource with a
  particular protocol—audio, video, or other media; the database server stores
  information registering devices**];

- means for determining first information in the first message for uniquely
  requesting the first resource, if it is determined that the first packet includes the
  first message [**paragraphs 0120, 0126, 0141 and 0142; messages contain
  information regarding the requested resources**], and

- means for storing data indicating the first information in a first data structure in
  association with the first address, if it is determined that the first packet includes
  the first message [**paragraphs 0033, 0042, 0054, 0082, 0104 and 0110; data
  associated with the addresses is stored in the mapping table**].

      b.   **Claims 1, 26 and 29** are substantially similar to claim 28 and are therefore

rejected under the same basis.

c.   **Per claim 16,** *March et al* teach a method for translating between logical

addresses and ports of a first network, and a logical address and ports of a second network

connected to the first network at an intermediate device, the method comprising the computer-

implemented steps of:

- receiving a first packet at the intermediate device from a first device not on the first network [**Figure 1, paragraphs 0102-0110, 0124 and 0125; the application may receive a packet from a user or device within a different domain or from a different network**];

- sending a second packet to a second device on the first network in response to receiving the first packet, the second packet including, in a destination address field, data indicating a translated address [**Figure 1, Abstract, paragraphs 0006, 0007, 0024 and 0126-0153; a message is sent to the second application server of a second network, message contains source, port and destination address data**];

- determining whether the first packet includes a first message requesting a resource according to a particular protocol [**paragraphs 0022, 0024, 0032-0035, 0041-0054, 0070-0084 and 0142; parsing determines whether the EndpointId includes information for a resource with a particular protocol—audio, video, or other media; the database server stores information registering devices**]; and

- if it is determined that the first packet includes the first message requesting the resource, then determining first information in the first message for uniquely requesting the resource [**paragraphs 0120, 0126, 0141 and 0142; messages contain information regarding the requested resources**], and

- before said step of sending the second packet, determining the translated address on the first network based on a data item in a first data structure, the data item indicating the translated address and the first information [**paragraphs 0033, 0042, 0054, 0082, 0104 and 0110; data associated with the addresses is stored in the mapping table**].

d.   **Claim 27** is substantially equivalent to claim 16 and is therefore rejected under

the same basis.

e.   **Per claim 2,** *March et al* teach the method as recited in Claim 1, further

comprising the computer-implemented step of:

- receiving at the intermediate device a third packet from a third device on the second network [**Figures 1 and 2, paragraphs 0006, 0020-0041, 0124, 0181 and 0182; application server receives packet from other users or devices within the another network**];

- determining whether the third packet includes a second message requesting a second resource according to the particular protocol [**paragraphs 0007, 0022, 0024, 0032-0035, 0041-0054, 0070-0084 and 0142; parsing determines whether the EndpointId includes information for a resource with a particular protocol—audio, video, or other media; determination is made as to whether a resource request is being made**]; and

- if it is determined that the third packet includes the second message requesting the second resource, then determining second information in the second message for uniquely requesting the second resource [**paragraphs 0120, 0126, 0141 and 0142; messages contain information regarding the requested resources**],

- determining whether the second information matches the first information in the data structure [**paragraphs 0035-0084; information associated with the addresses and ports of the communicating devices is matched from determinations of the translated and associated NAPT address entries in the mapping table**], and

- if the second information matches the first information, sending the second message to the first device having the first address associated with the first information [**paragraphs 0084 and 0085; upon matching the associated source and destination NAPT data of the devices, a communication path is established between the devices and messages are transported between them**].

f.   **Per claim 3,** *March et al* teach the method as recited in Claim 1, wherein, if it is

determined that the first packet includes the first message, then inserting in the second packet a

second message based on the first message [**paragraphs 0054, 0104, 0105 and 0110-0121;**

when updating the reserved resources in the mapping table, the updated entry will then be,

implicitly, inserted into the other packets to update their corresponding information].

g.   **Claim 17** is substantially similar to claim 3 and is therefore rejected under the same basis.

h.   **Per claim 4,** *March et al* teach the method as recited in Claim 3, wherein the second message is the same as the first message [paragraphs 0053-0055; **upon mapping, the originating NAPT address for device A is the same as the terminating NAPT address for device B**].

i.   **Claim 18** is substantially similar to claim 4 and is therefore rejected under the same basis.

j.   **Per claim 5,** *March et al* teach the method as recited in Claim 3, further comprising the computer-implemented step of generating the second message by replacing, in a source address field, data indicating the first address with data indicating the particular address of the intermediate device on the second network [**paragraphs 0033-0035, 0085, 0086, 0089 and 0105; field data is updated or modified, which also indicates the associated address/port of the media portal intermediate device through which communication travels**].

k.   **Claim 6** is substantially similar to claims 3 and 5 and is therefore rejected under the same basis.

l.   **Per claim 7,** *March et al* teach the method as recited in Claim 1, wherein the particular protocol uses a well-known port for requesting the first resource [**paragraph 0031-0035, 0053, 0088 and 0089; provisions are made for protocols using particular ports for resource requests via the media portals**].

m.   **Claim 19** is substantially similar to claim 7 and is therefore rejected under the same basis.

n.   **Per claim 13,** *March et al* teach the method as recited in Claim 2, wherein the third packet includes, in a destination address field, data indicating the particular address of the intermediate device **[paragraphs 0043-0054; in developing the connection route, packets transported via the media portal include the EndpointID parameter identifying the address and port used by the media portal for the allocated resources]**.

o.   **Claim 22** is substantially similar to claim 13 and is therefore rejected under the same basis.

p.   **Claims 14 and 23** are substantially similar to claims 7 and 13 and are therefore rejected under the same basis.

q.   **Per claim 24,** *March et al* teach the method as recited in Claim 16, wherein the first device obtains the first information from a protocol server that is not on the first network **[Figure 1, 0006 and 0018-0022; devices may obtain information from servers external to their local network]**.

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10.   Claims **8-12, 15, 20, 21 and 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over *March et al* [US 20030007486] in view of *Gurijala et al* (USPN 6,601,090).

a.   **Per claim 8,** *March et al* teach the method of Claim 1 as applied above, yet fail to explicitly teach the method as recited in Claim 1, wherein the particular protocol is a network basic input and output system (NetBIOS) open protocol. However, *Gurijala et al* teach support of the NetBIOS protocol with the use of the object caching system, which comprises a cache name server and plurality of web cache servers (**Abstract and Col.4 Lines 19-27**).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *March et al* and *Gurijala et al* for the purpose of extending the compatibility of the system to support the NetBIOS standard protocol which serves to activate network operations on IBM compatible computing devices operating under MS-DOS or some version of UNIX; because it would enhance the system to be able to provide name registration and services while allowing for requests of the lower-level network services to conduct sessions between networked nodes.

b.   **Claims 9, 20 and 25** are substantially similar to claim 8 and are therefore rejected under the same basis.

c.   **Per claim 10,** *March et al* teach the method as recited in Claim 1, wherein the first information is a resource name (**Col.4 Lines 8-18 and Col.5 Lines 10-15; unique information within a message for requesting a resource may be in the form of a URI, uniform resource identifier**).

d.   **Claim 21** is substantially similar to claim 10 and is therefore rejected under the same basis.

e.   **Per claim 11,** *March et al* teach the method Claim 5 as applied above, yet fail to

explicitly teach the method as recited in Claim 5, wherein the protocol server is a name server

that stores a resource name of the first resource in the second message in association with an

address based on data in the source address field of the second message. However, *Gurijala et al*

teach a cache name server that stores the resource/object name in a second message or object

request that also includes the URI or IP address of the requested object, data is not stored in a

port field (**Col.2 Lines 44-55, Col.4 Lines 8-18, Col.5 Lines 7-24, Col.5 Lines 55-65 and Col.6

Lines 31-41**).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teachings of *March et al* and *Gurijala et al* for the purpose of

recording and maintaining an updated account of resource locations in a server for use in

generating messages to the right resource providers; because the efficiency of the system to

access resources, depends on the resources being properly associated with their corresponding

addresses and to remedy or update any inconsistencies of misinformation.

f.   **Claim 12** is substantially similar to claim 11 and is therefore rejected under the

same basis.

g.   **Per claim 15,** *March et al* teach the method of Claim 1 as applied above, yet fail

to explicitly teach method as recited in Claim 1, further comprising the computer-implemented

steps of: monitoring messages associated with registering the first resource with the protocol

server; determining whether the first resource is not registered with the protocol server; and if it

is determined that the first resource is not registered with the protocol server, then removing

from the first data structure the data indicating the first information in association the first

address. However, *Gurijala et al* teach determining that a resource is not present in the CNS—

cache name server—database after searching for the requested resource, removing the

information identifying the location of the resource and, if later found in a different location,

replacing it with updated information **(Col.5 Line 26-Col.6 Line 21)**.

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teachings of *March et al* and *Gurijala et al* for the purpose of

maintaining an updated account of resource locations in a server for efficient accessibility of the

resource. Because network resources change frequently, it is important to keep a current entry of

where the resource is and to remove or revise its old information.

Conclusion

11.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

a.   *Fell, Jr.* (USPN 6,826,624) discloses a method and apparatus for network
resource access request redirection.

b.   *Bowman-Amuah* (USPN 6,742,015) discloses base services patterns in a
netcentric environment.

c.   *Foltz et al* (USPN 5,740,422) disclose a method an apparatus for resource
management for a LAN server enterprise.

d.   *Rueda et al* [US 20020112076] disclose an Internet protocol-based computer
network service.

e.   *Amin et al* (USPN 6,714,987) disclose architecture for an IP-centric distributed
network.

f.   *Wilson* [US 20010054101] discloses a server and method to provide access to a
network by a computer configured for a different network.

g.   *Davis et al* (USPN 6,643,696) disclose a method and apparatus for tracking client
interaction with a network resource and creating client profiles and resource
database.

     h.   *Bates et al* (USPN 6,801,906) disclose a method and apparatus for finding information on the Internet.

     i.   *Barrera et al* (USPN 6,748,448) disclose a high performance Internet storage access scheme.

     j.   *Blight et al* (USPN 6,785,542) disclose a resource proxy for mobile wireless electronic devices.

     k.   *Kalmanek, Jr. et al* (USPN 6,483,912) disclose a method for allocating network resources.

12.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie Shingles whose telephone number is 571-272-3888. The examiner can normally be reached on Monday-Friday 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristie Shingles
Examiner
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